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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/620,315

07/14/2003

Moshe Rosenberg

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07/14/2009

QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C.

P O BOX 458

ALAMEDA, CA 94501

EXAMINER

MERCIER, MELISSA S

ART UNIT

PAPER NUMBER

1615

MAIL DATE

DELIVERY MODE

07/14/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/620,315	<b>Applicant(s)</b> ROSENBERG ET AL.	
	<b>Examiner</b> MELISSA S. MERCIER	<b>Art Unit</b> 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15, 20-26 and 67 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 20-26, 67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Summary***

Receipt of Applicants Remarks and Amended Claims filed on April 13, 2009 is acknowledged. Claims 1-15, 20-26, and 67 are pending in this application.

### ***Withdrawn Rejections***

#### ***Claim Rejections - 35 USC § 103***

The rejections of claims 1-8, 11-15, 20-23, and 25 under 35 U.S.C. 103(a) as being unpatentable over Freeman (US Patent 4,808,429) has been withdrawn in view of Applicants amendment to claim 1 reciting "comprising 20% or less free fatty acids".

### ***Maintained Rejections***

#### ***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4 8, 13-14, 21-23, and 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by A Hard Boiled Egg as evidenced by Structure of an Egg (Incubation and Embryology-University of Illinois).

The instant claims are drawn to a gel formed of oil in water emulsion. The claims recite the protein is "cross linked". Divalent linkers, formaldehyde, gluteraldehyde, and other aldehydes have been excluded as cross linking agents. The gelled emulsion

Art Unit: 1615

further comprises supplemental constituents, including vitamins, nutrients, proteins, amino acids, polyunsaturated lipids, minerals, bioactive materials, and pharmaceuticals.

It is submitted that a hard boiled egg would meet the limitations of the instant claims. An egg comprises 74% water, 13% protein, and 11% fat. The egg white, which would constitute the continuous phase, comprises 88% water with 11% protein contained within. The yolk would constitute Applicant's claimed lipid droplets or particles within a dispersed phase. Eggs are known to include numerous vitamins, including vitamins A, D, E, B12, and B6, as well as folate, thiamine, riboflavin, phosphorous, zinc, iron, choline, lutein and zeaxanthin. The vitamins would constitute the supplemental constituents as claimed in the instant claims. According to the article, protein is found in both the continuous and lipid phase. When an egg is boiled, the proteins denature and form hydrophobic bonds resulting in a solid mass.

Regarding claims 13-14, egg yolks are well known emulsifying agents and the egg components themselves are a hydrocolloid.

Regarding claim 26, while an egg is low in calcium, calcium is still present thereby meeting the limitation of the claim.

### ***Response to Arguments***

Applicant's arguments have been fully considered but they are not persuasive. Foremost, Applicant argues the Denaturation article should be disregarded since it was obtained from Wikipedia. Applicant is reminded that the articles were used for evidentiary purposes only to clarify inherent features of a hard boiled egg, since

Art Unit: 1615

Applicant has not presented any arguments regarding the inherent property of the denaturations of the protein when the egg is boiled, it is the position of the Examiner that Applicant has conceded to such property as well known and the evidence for supporting such an inherent property is not needed and the Denaturation article is therefore no longer needed in the rejection.

Applicant further argues the yolk does not comprise a plurality of droplets or particles. The examiner disagrees. It is unclear if Applicant is asserting the entire yolk is one lipid molecule. The yolk would be comprised of numerous droplets. Clarification is requested. Applicant's remarks state "one, two or three lipid molecules do not necessarily provide a dispersed phase of lipid droplets". It is unclear how Applicant is attempting to define the dispersed phase.

It is unclear what Applicant is alleging by the statement "the present action avoids discussion of a "dispersed phase" as found in the claim and specification, therefore, failing to state a case. The Examiner respectfully disagrees. The yolk of the egg meets the limitations of Applicant's dispersed phase.

Since a hard boil egg meets the structural limitations of the instant claims, it is the position of the examiner; absent a showing of evidence to the contrary that it would not provide the same functional properties. Furthermore, the recitation of whereby supplemental constituents or lipid droplets, suitable for ruminant ingestion, are protected against degradation, modification, or removal from the gel during passage through a rumen do not provide any further structural limitations to the claims other than those already recited in a-c. The claims are drawn to a composite gel. A hard boiled egg

Art Unit: 1615

meets all the structural limitations of the instant claims. Therefore, absent a showing to the contrary, it is the position of the Examiner that a hard boiled egg would inherently possess the same functional limitations as the instant claims.

### ***Newly Applied Rejections***

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-15, 20-26, and 67 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has amended claim 1 to recite "comprising 20% or less of free fatty acids". Applicant has pointed to paragraphs 22, 44, 48, 65, 80 and 81 for support for the amendment. However, the Examiner was unable to locate written description support for the "free" fatty acids in the amount of 20% or less. While the specification discloses supplemental components can be present in the amount of 0-75%, preferably 1-20%, and supplemental components can include fatty acids, there is not disclosure of "free" fatty acids in the claimed amount. **This is a New Matter Rejection.**

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rohwer (US Patent 5,514,388), which discusses products and processes for protein encapsulation of lipids.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA S. MERCIER whose telephone number is (571)272-9039. The examiner can normally be reached on 8:00am-4:30pm Mon through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone

Art Unit: 1615

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melissa S Mercier/  
Examiner, Art Unit 1615

/MP WOODWARD/  
Supervisory Patent Examiner, Art Unit 1615